PCT/NZ203/00281

RECEIVED

16 MAR 2004

WIPO PCT

Best Available Copy

CERTIFICATE

This certificate is issued in support of an application for Patent registration in a country outside New Zealand pursuant to the Patents Act 1953 and the Regulations thereunder.

I hereby certify that annexed is a true copy of the Provisional Specification as filed on 23 December 2002 with an application for Letters Patent number 523361 made by Jacking Systems Ltd.

Dated 2 March 2004.

PRIORITY DOCUMENT
SUBMITTED OR TRANSMITTED IN
COMPLIANCE WITH

RULE 17.1(a) OR (b)

Neville Harris

Commissioner of Patents, Trade Marks and Designs



atents Form # 4

NEW ZEALAND

Patents Act 1953

PROVISIONAL SPECIFICATION

Title: Scaffolding Means

Jacking Systems Ltd, We,

Nationality: A New Zealand company

18A Sprinfield Road, Western Springs, AUCKLAND, New Zealand, Address:

do hereby declare this invention to be described in the following statement:

-1-

INVALLECTUAL PROPERTY OFFICE OF N.I. 2 3 DEC 2002

FIELD

This invention relates to a scaffolding system and has particular application to an apparatus for use with for a multi-story building being constructed with raisable pre-cast concrete slabs.

5 BACKGROUND

Scaffolding systems about construction sites are generally known. Typically, these systems take a considerable amount of time to set up and move about the construction site.

It can be appreciated that often construction of one floor is unable to be carried out until the scaffolding and associated safety apparatus has be disengaged from a lower floor, and connected with a new floor.

There exists a need for a scaffolding system that is easy to set up, and does not require dismantling and / or movement about the construction site, wherein a degree of the movement is automated.

OBJECT

10

20

It is an object of this invention to provide an improved scaffolding means for use with construction of a building, or at least one that will provide the public with a useful choice.

STATEMENT OF INVENTION

In one aspect of the present invention, there is exists a scaffolding means, said scaffolding means adapted to associate with and accompany a material being lifted, such as a concrete slab, wherein said scaffolding means comprises a platform, said platform adapted to engage with a shaft, said platform adapted to allow a number of persons to stand thereon; said shaft therein passing through a guiding means, said guiding means connected to a material to be lifted; a connection means therein adapted to connect the shaft with the material to be lifted.

Preferably, said guiding means comprises a sleeve.

More preferably, said scaffolding means is adapted to be used in co-operation with the construction of a multi-storey building.

Even more preferably, said construction comprises the use of lifting means such as jacks, in order to lift and otherwise move concrete slabs about the workplace.

Preferably, said shaft spans at least one floor in height.

Preferably, said material to be lifted is a concrete slab.

Preferably, said material connection means is repositionable.

Optionally, the scaffolding means is provided with a barrier or guard rail to the outer edge of the platform.

DESCRIPTION OF DRAWINGS

These and other aspects of the present invention, which should be considered in all its novel aspects, will become apparent from the following description, which is given by way of example only with reference to the accompanying drawings in which:

- Is a side elevation of a building, the uppermost slab prepared for the pouring of an additional slab thereon.
 - Figure 2: Is a side elevation of a building, the slab engagement means having been connected with newly poured slab 24.
- Figure 3: Is a side elevation of a building, slab 24 and associated scaffolding having been raised.
 - Figure 4: Is a side elevation of a building, slab 26 having been poured onto slab 24.

 Received Time 23. Dec. 11:49

DETAILED DESCRIPTION

10

15

The following will now describe the use of the scaffolding means according to one embodiment of the present invention, wherein the apparatus is adapted for use with for a multi-story building being constructed with raisable pre-cast concrete slabs.

In order to provide greater clarity with respect to the accompanying scaffolding means, the following now details the sequence applied to the construction of a multi-storey building, to which the apparatus of the present invention is associated:

Firstly, a concrete slab is poured about the jack. The slab is cured, and preparations are made for the pouring of an additional slab. The slab and associated preparation means are then raised. The connection means is then disengaged from newly raised slab, the uppermost slab is poured, and the connection means is engaged with newly poured slab. The process is then repeated.

As shown in figure 1, there exists a ground floor slab 20, a first floor slab 22, and boxing 6, in preparation for the pouring of an additional slab 24. Slab 20 is provided with a guiding means 10 outwardly affixed thereto. A shaft 12 is provided through said guiding means, and incorporates a platform 5, said shaft otherwise hanging from slab 22 by way of the outwardly affixed connection means 18.

It will be appreciated that workmen of the construction site will stand on the platform 5, in order to pour said additional slab 24.

- As seen in figure 2, it will be appreciated that the additional slab 24 has now been poured, and steps taken to prepare for the raising of the slab 24. Said connection means 18 is disengaged from lower slab 22, and re-engaged with top slab 24. It is noted that the shaft 12 is disengaged with guide means 10 during lifting, and accordingly guide means 11 has been introduced to associate the shaft 12 with slab 22.
- 25 Referring now to figure 3, it will be appreciated that upon lifting of uppermost slab 24, the shaft 12 and associated platform 5 will also be raised.

Figure 4 shows the preparation for the pouring and subsequent raising of an additional slab 24.

As it will be clear to a person skilled in the art, the above sequence can then be repeated for the number of storeys required for the building.

5 ADVANTAGES

The present invention provides an inventive apparatus for use with the construction of a multi-storey building. It will be appreciated that there is no need to reposition scaffolding about the building, as the invention allows the apparatus to effectively climb the building with each additional slab being raised. It will also be appreciated that the present apparatus is easy to assemble and operate.

VARIATIONS

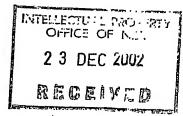
It will be appreciated that various alterations can be made to the foregoing without detracting from the spirit or scope of the invention. For example, the shaft 12 may comprise a substantially vertical, elongate member (or combination of members) of a variety of differing cross-sectional shapes.

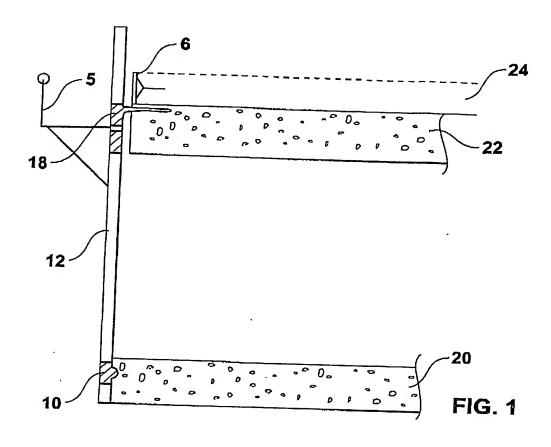
20 PIPERS

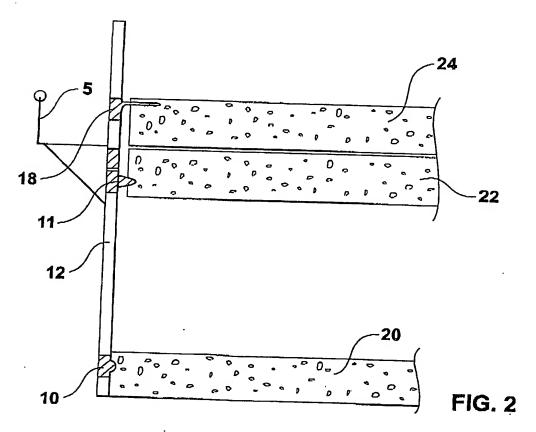
10

15

Attorneys for the Applicant JACKING SYSTEMS LIMITED







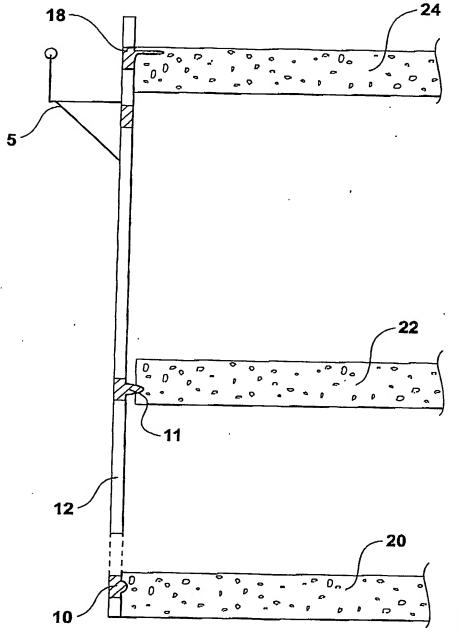
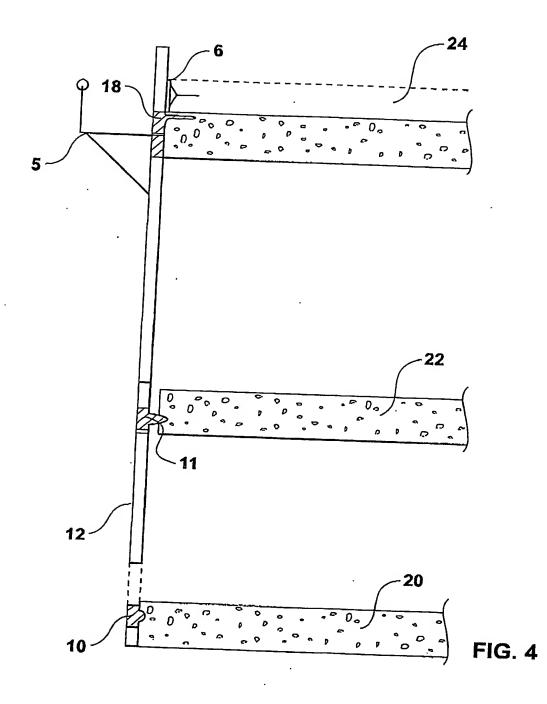


FIG. 3



. (

This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:
☐ BLACK BORDERS
☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
☐ FADED TEXT OR DRAWING
☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
☐ SKEWED/SLANTED IMAGES
☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
☐ GRAY SCALE DOCUMENTS
☐ LINES OR MARKS ON ORIGINAL DOCUMENT
☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
, ·

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.